

USER GUIDE



EZ Connect™ N
150 Mbps Wireless N USB Adapter

SMCWUSBS-N4



EZ Connect™ N SMCWUSBS-N4 User Guide

SMC®

N e t w o r k s

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WARRANTY AND PRODUCT REGISTRATION

To register SMC products and to review the detailed warranty statement, please refer to the Support Section of the SMC Website at <http://www.smc.com>.

COMPLIANCES

FEDERAL COMMUNICATION COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ◆ Reorient or relocate the receiving antenna
- ◆ Increase the separation between the equipment and receiver
- ◆ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- ◆ Consult the dealer or an experienced radio/TV technician for help

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.



NOTE: The manufacturer is not responsible for any radio or tv interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

IMPORTANT NOTE: FCC RADIATION EXPOSURE STATEMENT

This device has been tested for compliance with FCC RF Exposure (SAR) limits in the typical laptop computer configuration and this device can be used in desktop or laptop computers. This device cannot be used with handheld PDAs (personal digital assistants). This device and its antenna must not be co-located or operated in conjunction with any other antenna or transmitter. SAR measurements are based on a 5mm spacing from the body and that compliance is achieved at that distance.

TAIWAN NCC

根據國家通信傳播委員會低功率電波輻射性電機管理辦法規定：

第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

CE MARK WARNING

This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

NATIONAL RESTRICTIONS

This device is intended for home and office use in all EU countries (and other countries following the EU directive 1999/5/EC) without any limitation except for the countries mentioned below.

| Country | Restriction | Reason/Remark |
|--------------------|---|--|
| Bulgaria | None | General authorization required for outdoor use and public service |
| France | Outdoor use limited to 10 mW e.i.r.p. within the band 2454-2483.5 MHz | Military Radiolocation use. Refarming of the 2.4 GHz band has been ongoing in recent years to allow current relaxed regulation. Full implementation planned 2012 |
| Italy | None | If used outside of own premises, general authorization is required |
| Luxembourg | None | General authorization required for network and service supply(not for spectrum) |
| Norway | Implemented | This subsection does not apply for the geographical area within a radius of 20 km from the centre of Ny-Ålesund |
| Russian Federation | None | Only for indoor applications |



NOTE: Do not use the product outdoors in France.

EUROPE - EU DECLARATION OF CONFORMITY

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC. The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the R&TTE Directive 1999/5/EC:

- ◆ EN 60950-1:2006 + A11: 2009
Safety of Information Technology Equipment.
- ◆ EN 300 328 V1.7.1: 2006-10
Electromagnetic compatibility and Radio spectrum Matters (ERM);
Wideband transmission systems; Data transmission equipment
operating in the 2,4 GHz ISM band and using wide band modulation
techniques; Harmonized EN covering essential requirements under
article 3.2 of the R&TTE Directive.
- ◆ EN 301 489-17 V1.8.1/ 2008-04
EN 301 489-17 V2.1.1/ 2009-05
Electromagnetic compatibility and Radio spectrum Matters (ERM);
Electromagnetic Compatibility (EMC) standard for radio equipment and
services; Part 17: Specific conditions for 2.4 GHz wideband
transmission systems and 5 GHz high performance RLAN equipment.
- ◆ EN 55022: 2006 + A1: 2007
Limits and methods of measurement of radio disturbance
characteristics of information technology equipment.
- ◆ EN 55024: 1998 + A1: 2001 + A2: 2003
Information technology equipment immunity characteristics limits and
methods of measurement.
- ◆ EN 62311: 2008
Assessment of electronic and electrical equipment related to human
exposure restrictions for electromagnetic fields (0 Hz - 300 GHz).

This device is a 2.4 GHz wideband transmission system (transceiver), intended for use in all EU member states and EFTA countries, except in France and Italy where restrictive use applies.

In Italy the end-user should apply for a license at the national spectrum authorities in order to obtain authorization to use the device for setting up outdoor radio links and/or for supplying public access to telecommunications and/or network services.

This device may not be used for setting up outdoor radio links in France and in some areas the RF output power may be limited to 10 mW EIRP in the frequency range of 2454 - 2483.5 MHz. For detailed information the end-user should contact the national spectrum authority in France.



This equipment may be operated in:



The official CE certificate of conformity can be downloaded by selecting the relevant model/ part number from www.smc.com -> support -> download.

| | |
|------------------------|---|
| Bulgarian Български | С настоящето, SMC Networks декларира, че това безжично устройство е в съответствие със съществените изисквания и другите приложими разпоредби на Директива 1999/5/EC. |
| Czech Česky | SMC Networks tímto prohlašuje, že tento Radio LAN device je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES. |
| Danish Dansk | Undertegnede SMC Networks erklærer herved, at følgende udstyr Radio LAN device overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF |
| Dutch Nederlands | Hierbij verklaart SMC Networks dat het toestel Radio LAN device in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG Bij deze SMC Networks dat deze Radio LAN device voldoet aan de essentiële eisen en aan de overige relevante bepalingen van Richtlijn 1999/5/EC. |
| English | Hereby, SMC Networks, declares that this Radio LAN device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. |
| Estonian Eesti | Käesolevaga kinnitab SMC Networks seadme Radio LAN device vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele. |
| Finnish Suomi | Valmistaja SMC Networks vakuuttaa täten että Radio LAN device tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen. |
| French Français | Par la présente SMC Networks déclare que l'appareil Radio LAN device est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE |
| German Deutsch | Hiermit erklärt SMC Networks, dass sich dieser/diese/dieses Radio LAN device in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet". (BMW) Hiermit erklärt SMC Networks die Übereinstimmung des Gerätes Radio LAN device mit den grundlegenden Anforderungen und den anderen relevanten Festlegungen der Richtlinie 1999/5/EG. (Wien) |
| Greek Ελληνική | με την παρούσα SMC Networks δηλώνει ότι radio LAN device συμμορφώνεται προς τις ουσιαστικές απαιτήσεις και τις λοιπές σχετικές διατάξεις της οδηγίας 1999/5/εκ. |
| Hungarian Magyar | Alulírott, SMC Networks nyilatkozom, hogy a Radio LAN device megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak. |
| Italian Italiano | Con la presente SMC Networks dichiara che questo Radio LAN device è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE. |
| Latvian Latviski | Ar šo SMC Networks deklarē, ka Radio LAN device atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem. |
| Lithuanian Lietuvių | Šiuo SMC Networks deklaruoja, kad šis Radio LAN device atinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas. |

| | |
|-------------------------|--|
| Maltese Malti | Hawnhekk, SMC Networks, jiddikjara li dan Radio LAN device jikkonforma mal-htigijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC. |
| Polish Polski | Niniejszym SMC Networks oświadcza, że Radio LAN device jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC. |
| Portuguese Português | SMC Networks declara que este Radio LAN device está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE. |
| Romanian Romană | SMC Networks declară că acest dispozitiv fără fir respectă cerințele esențiale precum și alte dispoziții relevante ale Directivei 1999/5/EC. |
| Slovak Slovensky | SMC Networks týmto vyhlasuje, že Radio LAN device spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES. |
| Slovenian Slovensko | SMC Networks izjavlja, da je ta radio LAN device v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES. |
| Spanish Español | Por medio de la presente SMC Networks declara que el Radio LAN device cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE |
| Swedish Svenska | Härmed intygar SMC Networks att denna Radio LAN device står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG. |
| Turkish Turk | SMC Networks bu kablosuz cihazın temel gereksinimleri ve 1999/5/EC yonergesindeki ilgili koşulları karşıladığını beyan eder. |

ABOUT THIS GUIDE

PURPOSE This guide details the hardware features of the wireless adapter, including its physical and performance-related characteristics, and how to install the device and use its configuration software.

AUDIENCE This guide is for PC users with a working knowledge of computers. You should be familiar with Windows operating system concepts.

CONVENTIONS The following conventions are used throughout this guide to show information:



NOTE: Emphasizes important information or calls your attention to related features or instructions.



CAUTION: Alerts you to a potential hazard that could cause loss of data, or damage the system or equipment.



WARNING: Alerts you to a potential hazard that could cause personal injury.

RELATED PUBLICATIONS The following publication gives basic information on how to install and use the wireless adapter.

Quick Installation Guide

Also, as part of the wireless adapter's software, there is online help that describes all configuration related features.

REVISION HISTORY This section summarizes the changes in each revision of this guide.

MAY 2012 REVISION

This is the fourth revision of this guide. It includes the following change:

- ◆ Updated the Compliances section.

NOVEMBER 2011 REVISION

This is the third revision of this guide. It includes the following change:

- ◆ Added a notice under software installation.

SEPTEMBER 2011 REVISION

This is the second revision of this guide. It includes the following change:

- ◆ Updated the Compliances section.

MAY 2011 REVISION

This is the first revision of this guide.

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PRODUCT OVERVIEW

The adapter is designed to provide a high-speed and unrivaled wireless performance for your notebook and PC. With a faster wireless connection, you can get a better Internet experience, such as downloading, gaming, video streaming and so on.

The SMCWUSBS-N4's auto-sensing capability allows a high packet transfer rate of up to 150 Mbps for maximum throughput. The adapter has good capability on anti-jamming and it can also interoperate with other wireless (802.11b/g) products. The adapter supports WEP, WPA and WPA2 encryption to prevent outside intrusion and protect your personal information from being exposed.

The Quick Setup Wizard guides you step by step through the installation process; the AR51 Wireless Lite-N Client Utility helps you create a wireless connection immediately.

With unmatched wireless performance, reception, and security protection, the SMCWUSBS-N4 is the best choice for easily adding or upgrading wireless connectivity.

FEATURES

- ◆ IEEE 802.11g, IEEE 802.11b standards
- ◆ Supports WPA/WPA2 data security, IEEE 802.1X authentication, TKIP/AES encryption, WEP encryption
- ◆ Make use of IEEE 802.11n wireless technology to provide a wireless data rate of up to 150 Mbps
- ◆ Automatically adjust to lower speeds due to distance or other operating limitations
- ◆ Provides USB interface
- ◆ Supports Ad Hoc and Infrastructure modes
- ◆ Good capability on anti-jamming
- ◆ Supports roaming between access points when configured in Infrastructure mode

- ◆ Easy to configure and provides monitoring information
- ◆ Supports Windows 2000, Windows XP 32/64, Windows Vista 32, Windows 7

LED STATUS

Table 1: LED Indicator

| Status | Working Status |
|------------------|---|
| Off | The driver has not been installed. |
| Flashing Slowing | The driver has been installed but there is no data being transmitted or received. |
| Flashing Quickly | There is data being transmitted or received. |

HARDWARE INSTALLATION

There are two ways to install the Adapter:

1. Plug the Adapter directly to the USB port on your computer.
2. Connect the Adapter and your computer through the USB cable attached in package.



NOTE: The Found New Hardware Wizard screen will pop up when the adapter is installed correctly. Click Cancel.

SOFTWARE INSTALLATION

FOR WINDOWS XP The CD-ROM that comes with the package contains the USB driver for the Wireless USB Adapter.

The installation screens are similar for Windows 2000, Windows XP, Windows Vista and Windows 7. The installation interface for Windows XP is shown in this user guide.

To install the Wireless USB Adapter's driver for Windows 2000 and Windows XP, follow these steps:

1. Turn on your PC and wait until the Windows system has completely started.
2. Load the EZ Installation & Documentation CD that comes with the package. The install program should start automatically.



NOTE: If the install program does not start automatically, double-click My Computer, and then double-click the CD/DVD drive where the installation CD was placed. Open the SMCWUSBS-N4 folder and double-click "Setup.exe."

NOTE: This package only provides the driver for Installation. (台灣版本僅提供驅動程式安裝)

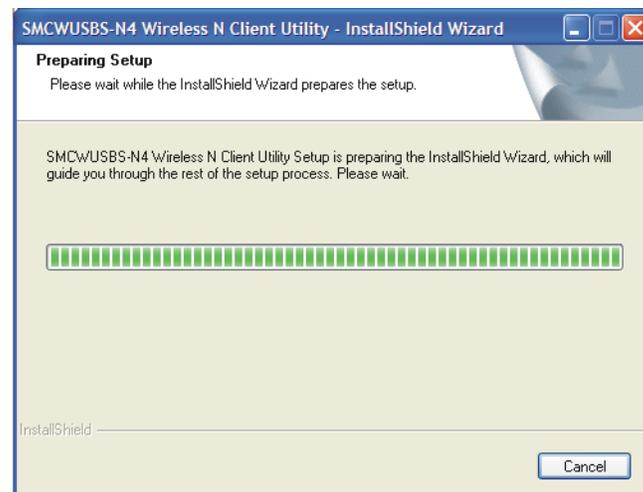
3. Click "Install Driver/Utility" to start the installation.

Figure 1: Install Driver/Utility



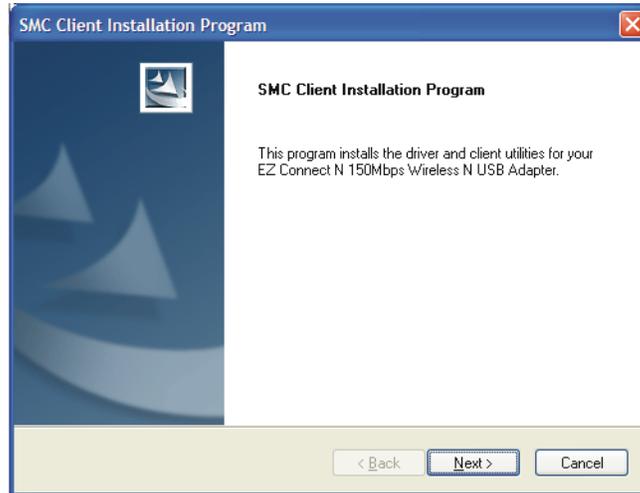
4. Wait for the InstallShield Wizard to start.

Figure 2: Prepare to Install



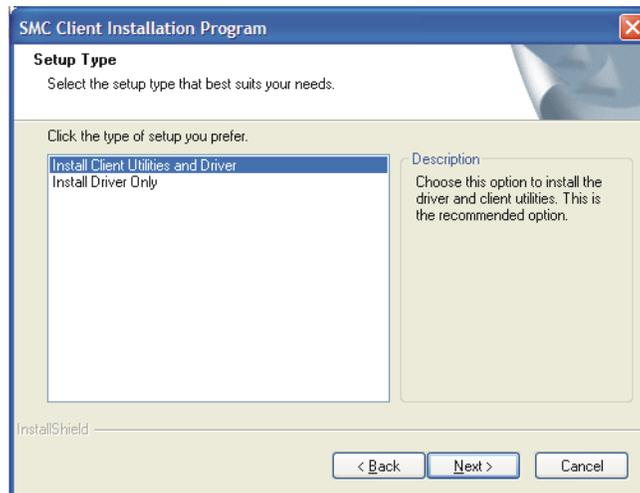
5. When the SMC Client Installation Program starts, click Next to continue.

Figure 3: Install SMC Client Installation Program



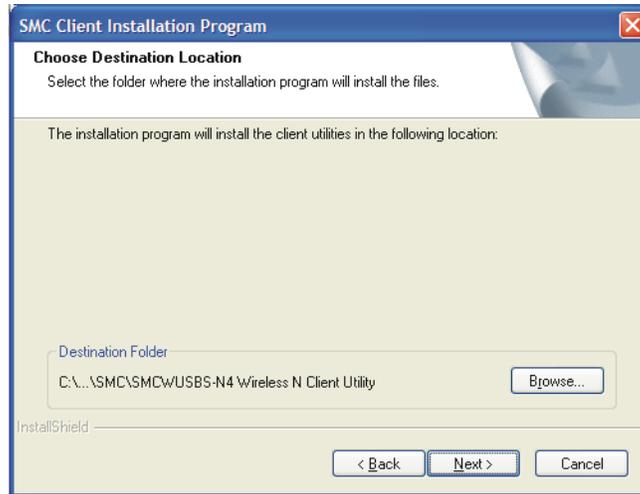
6. Select "Install Client Utilities and Driver." Otherwise, select "Install Driver Only" to install the driver only. Click Next to continue.

Figure 4: Install Client Utilities and Driver



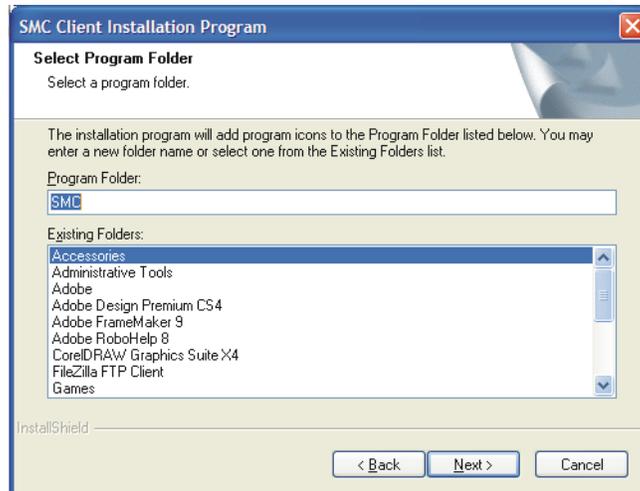
7. To change the destination location for the software, click Browse and select the new location. Click Next to continue.

Figure 5: Select the Location



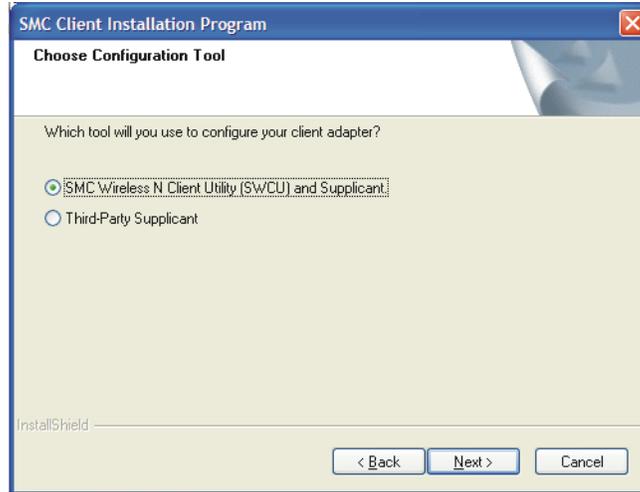
8. Select the program folder. Either create a new folder name or select one from the Existing Folders list. It is recommended to keep the default setting. Click Next to continue.

Figure 6: Select Program Folder



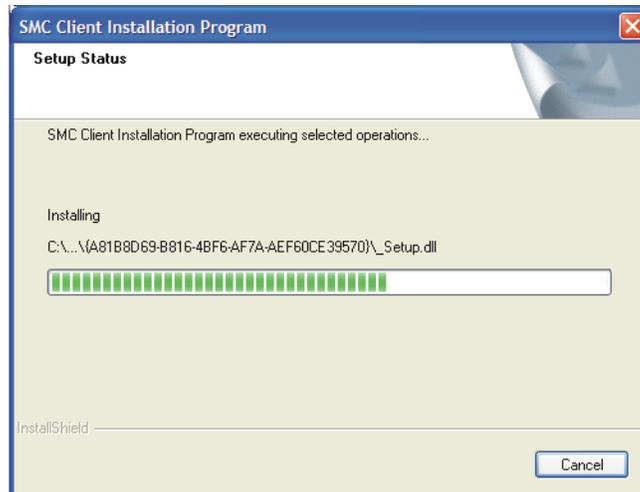
9. Choose the wireless configuration tool to use. If you are not sure, leave the default setting. Click Next to continue.

Figure 7: Choose Configuration Tool



10. Click OK to continue the Installation. Wait for the installation process to finish.

Figure 8: Installation Processing



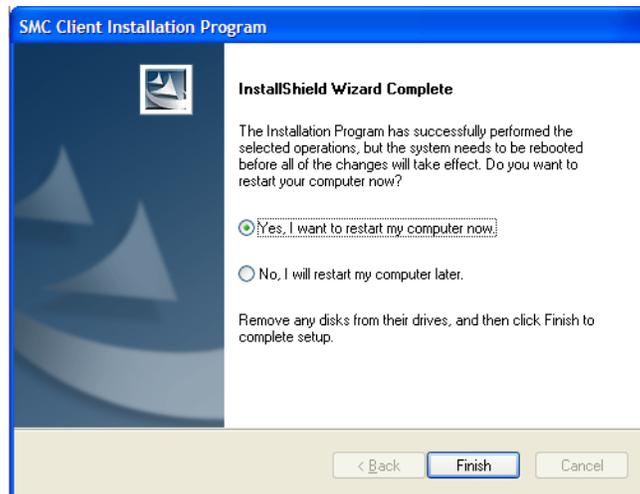
NOTE: For Windows XP, the Setup Wizard will notify you of how to proceed with the installation during these steps (as shown in [Figure 9 on page 20](#)). The drivers have been tested thoroughly, and are able to work with the operating system. Click "Continue Anyway" to continue the installation.

Figure 9: Software Installation Warning



11. When the "InstallShield Wizard Complete" message displays, click Finish to reboot the system.

Figure 10: Restart Computer



The WPS (Wi-Fi Protected Setup) function allows you to add a new wireless device to an existing network quickly.



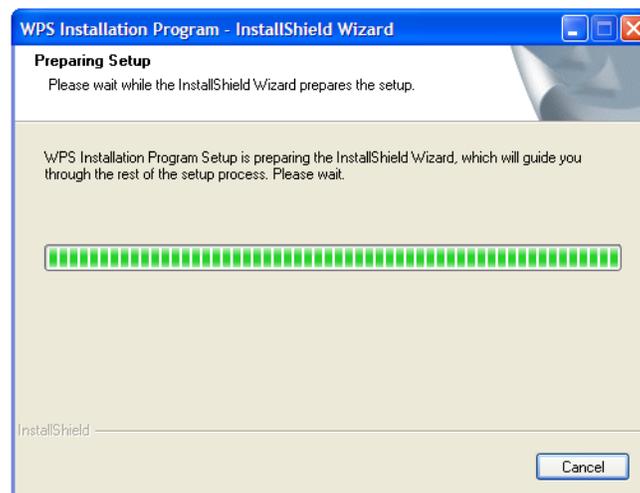
NOTE: The WPS function is not supported in Windows 7.

If the wireless card supports Wi-Fi Protected Setup (WPS), you can establish a wireless connection between wireless card and router using either the Push Button Configuration (PBC) method or PIN method.

First, the WPS software should be installed. Follow these steps:

1. Insert the Resource CD into your CD-ROM drive.
2. Double-click My Computer, and then double-click the CD/DVD drive where the installation CD was placed.
3. Open the SMCWUSBS-N4 folder, and double-click "wps.exe." The following figure (Figure 11) displays.

Figure 11: Prepare to Install WPS



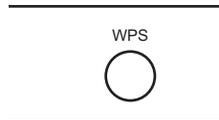
4. Follow the step-by-step instructions to complete the WPS installation.

When completed, the WPS function can be enabled. The following sections describe the two ways to use WPS.

PBC (PUSH BUTTON CONFIGURATION) METHOD

1. Press the WPS button of the AP/router. There are two ways:
 - a. Press the WPS button directly on the front panel of the AP/router, as shown in [Figure 12](#).

Figure 12: WPS Button



- b. Open the AP/router's web-based utility and click the WPS link on the main menu. [Figure 13](#) will display. Click Add device, then [Figure 14](#) displays. Select "Press the button of the new device in two minutes" and click Connect.

Figure 13: WPS Setup

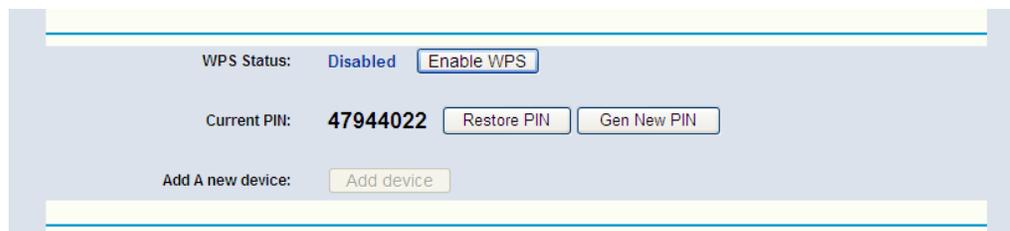
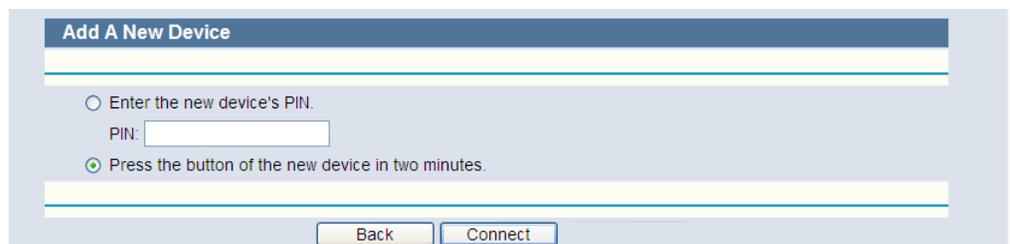


Figure 14: Add a New Device



2. Press the WPS button of the adapter. There are two ways:
 - a. Press and hold the WPS button of the adapter directly for 2 or 3 seconds.
 - b. Double-click the WPS icon on the desktop to open the WPS utility. You will see the welcome screen, as shown in [Figure 15](#). Click Next to continue, then select "Push the button on my access point" in the next screen ([Figure 16](#)) and click Next.

Figure 15: Start to Install WPS



Figure 16: Select the Method



3. Wait until the following figure appears. Click Finish to complete the WPS configuration.

Figure 17: WPS Configuration Completed



PIN METHOD

There are two ways to configure the WPS by PIN method:

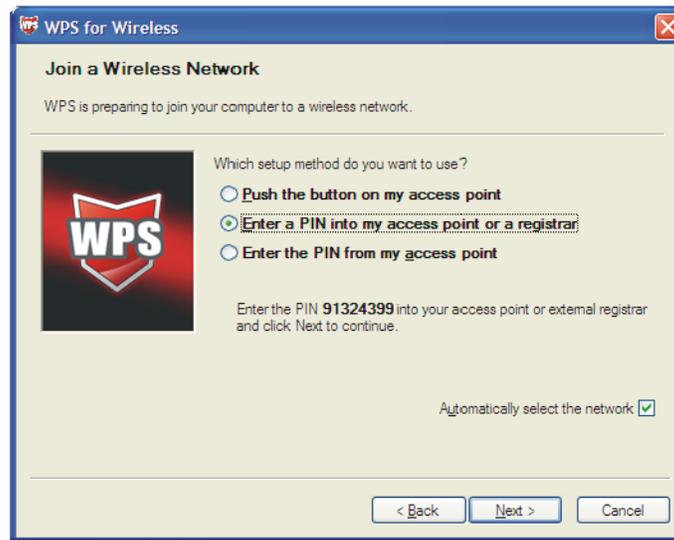
1. Enter a PIN into your AP/router device.
2. Enter the PIN from your AP/router device.

The detailed configuration procedures for each method follows.

ENTER A PIN INTO YOUR AP/ROUTER DEVICE

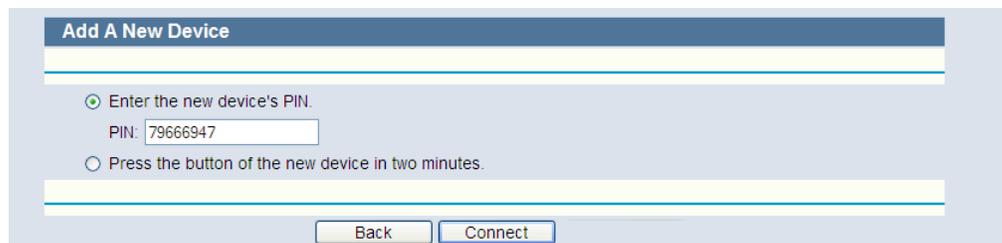
1. Double-click the WPS icon on the desktop to open the WPS Utility. You will see the welcome screen, as shown in [Figure 15 on page 23](#).
2. Click Next to continue. The "Join a Wireless Network" screen displays, as shown in [Figure 18 on page 25](#).
3. Select the second option, "Enter a PIN into my access point or a registrar." You will see the PIN value of the adapter displayed, which is randomly generated. Click Next.

Figure 18: Enter a PIN into the Access Point



4. Open the AP/router’s web-based utility and click the WPS link on the main menu. Then the [Figure 13 on page 22](#) will appear.
5. Click Add device. The screen in [Figure 19](#) appears.

Figure 19: Enter the device’s PIN

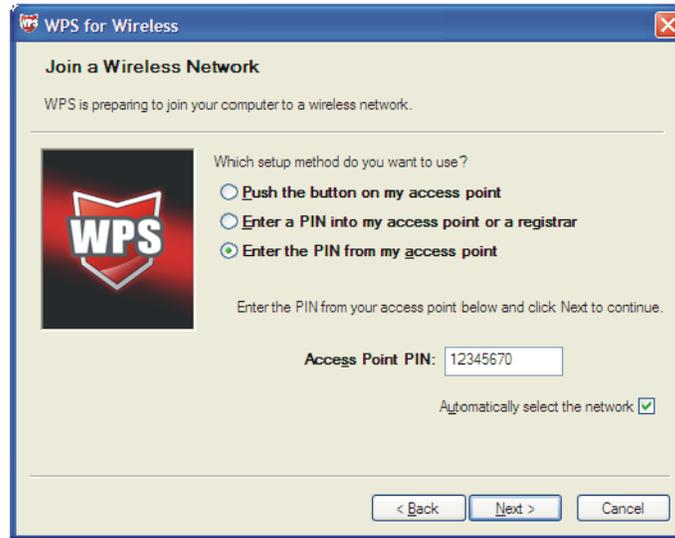


6. Select Enter the new device’s PIN and enter the PIN value of the adapter, click Connect.
7. When [Figure 16 on page 23](#) appears, the WPS configuration is complete.

**ENTER THE PIN FROM
YOUR AP/ROUTER
DEVICE**

1. Open the WPS Utility. You will see the welcome screen, as shown in [Figure 15 on page 23](#).
2. Click Next to continue. The “Join a Wireless Network” screen displays, as shown in [Figure 20 on page 26](#).
3. Select the third option, “Enter the PIN from my access point.” Then enter the PIN value, which is labeled on the bottom of the AP/router. Click Next.

Figure 20: Enter the PIN from the Access Point



4. When the screen in [Figure 21](#) appears, the WPS configuration is complete.

Figure 21: WPS Configuration Complete



NOTE: If you generate a new PIN code for your router, enter the new one instead.

A

HARDWARE SPECIFICATIONS

| | |
|-------------------------------|---|
| INTERFACE | USB 2.0 Interface |
| STANDARDS | IEEE 802.11g IEEE 802.11b |
| OPERATING SYSTEM | Windows 2000 Windows XP Windows Vista Windows 7 |
| RADIO DATA RATE | 11b: 1/2/5.5/11 Mbps 11g: 6/9/12/18/24/36/48/54 Mbps |
| MODULATION | 11b: CCK, QPSK, BPSK 11g: OFDM |
| MEDIA ACCESS PROTOCOL | CSMA/CA with ACK |
| DATA SECURITY | WPA/WPA2 64/128-bit WEP TKIP/AES |
| FREQUENCY | 2.4 ~ 2.4835 GHz |
| SPREAD SPECTRUM | Direct Sequence Spread Spectrum (DSSS) |
| SAFETY & EMISSIONS | FCC, CE |
| TEMPERATURE | Operating: 0 °C to 40 °C (32 °F to 104 °F) Storage: -40 °C to 70 °C (-40 °F to 158 °F) |

HUMIDITY Operating: 10% to 90% RH (non-condensing)
Storage: 5%-90% RH (non-condensing)

GLOSSARY

IEEE 802.11B The 802.11b standard specifies wireless product networking at 11 Mbps using direct-sequence spread-spectrum (DSSS) technology and operating in the unlicensed radio spectrum at 2.4 GHz. It supports WEP encryption for security. All 802.11 networks are also referred to as Wi-Fi networks.

IEEE 802.11G The specification for wireless networking at 54 Mbps using direct-sequence spread-spectrum (DSSS) technology, using OFDM modulation and operating in the unlicensed radio spectrum at 2.4 GHz. Includes backward compatibility with IEEE 802.11b devices and WEP encryption for security.

AD HOC NETWORK An ad hoc network is a group of computers, each with a wireless adapter, connected as an independent 802.11 wireless LAN. Ad hoc wireless computers operate on a peer-to-peer basis, communicating directly with each other without the use of an access point. Ad hoc mode is also referred to as an Independent Basic Service Set (IBSS) or as peer-to-peer mode, and is useful at a departmental scale or SOHO operation.

DSSS (DIRECT-SEQUENCE SPREAD SPECTRUM) DSSS generates a redundant bit pattern for all data transmitted. This bit pattern is called a chip (or chipping code). Even if one or more bits in the chip are damaged during transmission, statistical techniques embedded in the receiver can recover the original data without the need of retransmission. To an unintended receiver, DSSS appears as low power wideband noise and is rejected (ignored) by most narrowband receivers. However, to an intended receiver (that is, another wireless LAN endpoint), the DSSS signal is recognized as the only valid signal, and interference is inherently rejected (ignored).

FHSS (FREQUENCY HOPPING SPREAD SPECTRUM) FHSS continuously changes (hops) the carrier frequency of a conventional carrier several times per second according to a pseudo-random set of channels. Because a fixed frequency is not used, and only the transmitter and receiver know the hop patterns, interception of FHSS is extremely difficult.

- INFRASTRUCTURE NETWORK** An infrastructure network is a group of computers or other devices, each with a wireless adapter, connected as an 802.11 wireless LAN. In infrastructure mode, the wireless devices communicate with each other and to a wired network by first going through an access point. An infrastructure wireless network connected to a wired network is referred to as a Basic Service Set (BSS). A set of two or more BSS in a single network is referred to as an Extended Service Set (ESS). Infrastructure mode is useful at a corporation scale, or when it is necessary to connect the wired and wireless networks.
- SPREAD SPECTRUM** Spread Spectrum technology is a wideband radio frequency technique developed by the military for use in reliable, secure, mission-critical communications systems. It is designed to trade off bandwidth efficiency for reliability, integrity, and security. In other words, more bandwidth is consumed than in the case of narrowband transmission, but the trade off produces a signal that is, in effect, louder and thus easier to detect, provided that the receiver knows the parameters of the spread-spectrum signal being broadcast. If a receiver is not tuned to the right frequency, a spread-spectrum signal looks like background noise. There are two main alternatives, Direct Sequence Spread Spectrum (DSSS) and Frequency Hopping Spread Spectrum (FHSS).
- SSID** A Service Set Identification is a thirty-two character (maximum) alphanumeric key identifying a wireless local area network. For the wireless devices in a network to communicate with each other, all devices must be configured with the same SSID. This is typically the configuration parameter for a wireless PC card. It corresponds to the ESSID in the wireless access point and to the wireless network name. See also Wireless Network Name and ESSID.
- WEP (WIRED EQUIVALENT PRIVACY)** A data privacy mechanism based on a 64-bit, 128-bit, or 152-bit shared key algorithm, as described in the IEEE 802.11 standard. To gain access to a WEP network, you must know the key. The key is a string of characters that you create. When using WEP, you must determine the level of encryption. The type of encryption determines the key length; 128-bit encryption requires a longer key than 64-bit encryption. Keys are defined by entering a string in HEX (hexadecimal - using characters 0-9, A-F) or ASCII (American Standard Code for Information Interchange - alphanumeric characters) format. The ASCII format is provided so you can enter a string that is easier to remember. The ASCII string is converted to HEX for use over the network. Four keys can be defined so that you can change keys easily.
- WI-FI** A trade name for the 802.11b wireless networking standard, given by the Wireless Ethernet Compatibility Alliance (WECA, see <http://www.wi-fi.net>), an industry standards group promoting interoperability among 802.11b devices.

WLAN (WIRELESS LOCAL AREA NETWORK) A group of computers and associated devices communicate with each other wirelessly, which serves network users in a limited local area.

WPA (WI-FI PROTECTED ACCESS) A wireless security protocol that uses TKIP (Temporal Key Integrity Protocol) encryption, which can be used in conjunction with a RADIUS server.

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